



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,114	07/25/2001	Thomas Lemmons	043978-021000	5783
22204 7590 12/13/2007 NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			EXAMINER BUI, KIEU OANH T	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 12/13/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/915,114	<b>Applicant(s)</b> LEMMONS, THOMAS	
	<b>Examiner</b> KIEU-OANH BUI	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/21/2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12, 15, 18-25 and 30-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12, 15, 18-25, 30-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/21/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/21/2007 has been entered.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

3. Claims 1-12, 15, 18-25, and 30-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Estipona (U.S. Patent No. 6,795,973 B1) in view of Stone (US Patent Pub US 2003/0056224 A1).

In regard to claim 1, Estipona discloses a method and apparatus for delivering enhancement data over a separate delivery mechanism. The claimed steps of "transmitting a video program and at least one trigger employing a first television channel operating at a first

frequency” and “transmitting enhancement data employing a second television channel operating at a second frequency” are met (as shown in Figs. 1 & 4 and col. 3/line 45 to col. 4/line 28 as the video and at least one trigger are transmitted in transport type A employing television service or broadcast channels). Estipona does not clearly show “transmitting enhancement data employing a second television channel operating at a second frequency”; however, this technique is known and admitted as the prior art (Fig. 2 and specs). Furthermore, Stone teaches the same feature (page 1/par. 0010; page 2/par. 0017 & par. 0024 & 0025 of page 2) as Stone teaches the transport type A is for triggers without content and data is used the back channel - meaning via telephone or cable modem; and type B is for transporting enhancement data including triggers and contents, which clearly taught the two items are separate transport for two different contents as required. Therefore, it would have been obvious to one of ordinary skill in the art to modify Estipona’s ATVEF system with a clarification on how type A and type B is used for content transport in order to transmit the video program and at least one trigger employing a first television channel operating at a first frequency and transmitting enhancement data employing a second channel operating at a second frequency as on separate channels as desired.

In regard to claims 2-3, 16-17 and 26-27, Estipona discloses the use of a first frequency for television service channels, and the second frequency does not correspond to the frequency for a television service channel; and only a portion of the second channel is utilized for the enhancement data (refer back to claim 1 above for the same reasons).

In regard to claims 4, 7, 9 and 55, Estipona discloses conforming to the ATVEF specification (col. 2/lines 49-64).

In regard to claim 5, Estipona discloses transmitting enhancement data over a general-purpose data link or a service channel and inherently discloses that the second channel is of smaller bandwidth than the primary or first channel since this is admitted as prior art in the specifications, pages 2-3 and Figure 2.

In regard to claims 6, 11, 19, 24, 29 and 44, the claimed limitation of “transmitting display channel instructions with the enhancement data, wherein said display channel instructions indicate at least one service channel with which said enhancement data may be associated” is met by Figs. 1 & 4, col. 1/lines 40-43, and col. 5/line 40 to col. 6/line 11 for triggers and announcements.

In regard to claims 8 and 54, the claimed limitation of “transmitting display time instructions with the enhancement data, wherein said display time instructions indicate at least one time at which said enhancement data may be rendered” is met by Estipona with Figures 1 & 4 and col. 1/lines 40-43 & col. 3/line 54 to col. 4/line 28 for triggers, announcements.

In regard to claims 10 and 12, Estipona discloses, “enhanced content may be rendered independent of the channel currently viewed by a user” and “enhanced content may be rendered independent of the channel currently viewed by a user” (col. 4/lines 17-28, triggers may or may not include in the broadcast video stream, and it reveals the enhanced content may be rendered independently of the currently viewed channel).

In regard to claim 13, the claimed limitations of “transferring video information, compliant with the ATVEF standard for type A transport, to a transmission system”, “altering a URL contained in said video information” and “transmitting said video information” are met by Estipona (col. 3/lines 5-67 as Transport type A use two-way internet connection to fetch

resources using http://; and http:/ referred to URLs to resources available on the Internet – this shows that the URL contained in the video information being altered or changed as the transferring of video using type A transport since the URLs being fetched constantly).

In regard to claim 14, only the host name is changed because the substitution changes the link provided to the user. Time, channel and other attribute information are not changed.

In regard to claim 15, the claimed limitation of “removing said enhanced data from said video information to produce said video program comprising non-enhanced video information” is disclosed by Estipona (col. 5/lines 40-63 & col. 7/lines 5-24 as the triggers are extracted at the receiver for producing the video program comprising non-enhanced video information).

In regard to claims 18, 30, 33, 37, 52 and 53, Estipona does not disclose that the enhancement data is compressed prior to transmission and subsequently decompressed upon being received. However, the examiner takes Official Notice that it is notoriously well known in the art to compress data prior to transmission and decompressing the compressed data upon being received so as to make efficient use of the system’s available bandwidth. Consequently, it would have been obvious to one of ordinary skill in the art to modify Estipona’s with the aforementioned data compression for the stated advantage.

In regard to claims 20-23, 38 and 42-43, Estipona does disclose replacing the enhancement data with other enhancement data; Estipona discloses that the enhancement data is accessed employing a network connection; Estipona discloses that the other enhancement data is accessed on a real-time basis, and discloses that the enhancement data is stored at the headend (col. 4/line 61 to col. 5/line 63 & col. 6/lines 29-65 for URL locations and triggers replacements for updated or different URL locations in real time, the resource is at headend).

Claims 25, 31, 34-36, 39 and 45 are met by that discussed above for claim 1.

Enhancement data associated with the video program is accessed at the headend (resource stream 20, col. 3/lines 9-24 as triggers as “enhancement data” associated with audio/video stream at resources). Estipona does not clearly show “receive enhancement data on a second channel”; however, this technique is known and admitted as the prior art (Fig. 2 and specs). Furthermore, Stone teaches the same feature (page 1/par. 0010; page 2/par. 0017 & par. 0024 & 0025 of page 2) as Stone teaches the transport type A is for triggers without content and data is used the back channel - meaning via telephone or cable modem; and type B is for transporting enhancement data including triggers and contents, which clearly taught the two items are separate transport for two different contents as required. Therefore, it would have been obvious to one of ordinary skill in the art to modify Estipona’s ATVEF system with a clarification on how type A and type B is used for content transport in order to transmit the video program and at least one trigger employing a first television channel operating at a first frequency and transmitting enhancement data employing a second channel operating at a second frequency as on separate channels as desired.

In regard to claim 32, Estipona discloses that the enhancement data is stored at the headend (col. 3/lines 8-34 for triggers and storage medium 24).

In regard to claims 40-41 and 46-49, Estipona does not further disclose an adjustable tuner for receiving varied frequencies. However, the examiner takes Official Notice that it is notoriously well known in the art to use an adjustable tuner for receiving varied frequencies so as to take advantage of frequency division multiplexing. Consequently, it would have been obvious

to one of ordinary skill in the art to modify Estipona's with an adjustable tuner for receiving varied frequencies for the stated advantage.

In regard to claims 50 and 51, Estipona discloses storing part of the enhancement data in allocated storage local to the receiver (col. 4/line 61 to col. 5/line 17 as storage medium 24 is local to the user, not an external web server).

In regard to claim 54, the claimed limitation of a "program code is further operable to render an enhancement employing time information contained in said enhancement data" is met by Figures 1 & 4, and col. 1/lines 40-43, and col. 5/line 40 to col. 6/line 11 for triggers and announcements.

### ***Conclusion***

**4. Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to PTO New Central Fax number:**

(571) 273-8300, (for Technology Center 2600 only)

*Hand deliveries must be made to Customer Service Window,  
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (571) 272-7291. The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM, which alternate Friday off.



Application/Control Number:  
09/915,114  
Art Unit: 2623

Page 8

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller, can be reached at (571) 272-7353.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'K. Bui', with a long horizontal line extending from the end of the signature.

Kieu-Oanh Bui  
Primary Examiner  
Art Unit 2623

KB  
December 5, 2007